

**In the claims:**

Please add claim 18.

Please amend claims 1-17 as follows:

1. (Once Amended) Elementary analysis device by optical emission spectrometry on

laser produced plasma, the device comprising:

a pulsed laser source (6);

a diaphragm (8) having an aperture of a fixed diameter for selecting part of a laser beam emitted by said pulsed laser source on an object to be analyzed (2), said laser beam not being focused in the plane of said diaphragm;

first optical means (10) projecting the image of said diaphragm to infinity;

second optical means (12) receiving the image of said diaphragm projected to infinity by said first optical means and focusing it on said object to be analyzed to produce plasma (28) on the surface of said object,

wherein the image of said diaphragm focused on said object is equal to the required dimension on said object; and

the focal point of said laser beam, after crossing through said diaphragm and said first and second optical means, is outside the image plane of said diaphragm;

means (16, 18) for analyzing a light radiation spectrum emitted by the plasma, said means for analyzing disposed adjacent to the plasma;

means (20) for determining the elementary composition of said object from this spectrum analysis; and

means for displacing said object within a plane after each pulse of said laser source.

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2. (Once Amended) Device according to claim 1, wherein said second optical means (12) have a numerical aperture equal to approximately 0.1 or greater.

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3. (Twice Amended) Device according to claim 1, wherein the impact size of the laser beam on the object is greater than or equal to 1  $\mu\text{m}$ .

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4. (Twice Amended) Device according to claim 1, wherein the displacement frequency of the object (2) between two laser pulses of the source (6) is greater than or equal to 15 Hz.

5. (Twice Amended) Device according to claim 1, wherein the pulsed laser source (6) emits ultraviolet light.

6. (Twice Amended) Device according to claim 1, wherein the relative variation of energy between one laser pulse and the next does not exceed 5%.

7. (Twice Amended) Device according to claim 1, wherein said diaphragm (8) comprises a circular aperture for selecting the central part of the laser beam output from the laser source, said first optical means comprise refractive optical means, and said second optical means comprise refractive optical means having a microscope objective (12).

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8. (Twice Amended) Device according to claim 7, wherein said first and second optical means (10, 12) are anti-reflection treated at the wavelength of the light emitted by said pulsed laser source (6).

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9. (Twice Amended) Device according to claim 1, further comprising means (38) for blowing a gas jet onto said object (2).

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10. (Twice Amended) Device according to claim 1, further comprising:  
means (32) for observing said object, so that said object can be placed in the image plane of said diaphragm; and  
a mirror (26) reflecting at the wavelength of said pulsed laser source and transparent at other wavelengths, said mirror being placed on the light path between said first and second optical means and designed to reflect almost the entire laser beam to said second optical means and to transmit an image of said object to said means for observing.

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11. (Once Amended) Device according to claim 2, wherein the impact size of the laser beam on said object is greater than or equal to 1  $\mu\text{m}$ .

12. (Once Amended) Device according to claim 3, wherein the displacement frequency of said object (2) between two laser pulses of said pulsed laser source (6) is greater than or equal to 15 Hz.

13. (Once Amended) Device according to claim 1, wherein said pulsed laser source (6) emits ultraviolet light.

14. (Once Amended) Device according to claim 1, wherein the relative variation of energy between one laser pulse and the next does not exceed 5%.

15. (Once Amended) Device according to claim 6, wherein said diaphragm (8) comprises a circular aperture for selecting the central part of the laser beam output from the laser source, said first optical means are refractive optical means, and said second optical means are refractive optical means comprising a microscope objective (12).

16. (Once Amended) Device according to claim 8, further comprising means (38) for blowing a gas jet onto said object (2).

17. (Once Amended) Device according to claim 1, further comprising:

means (32) for observing said object, so that said object can be placed in the image plane of said diaphragm; and

a mirror (26) reflecting at the wavelength of said pulsed laser source and transparent at other wavelengths, said mirror being placed on the light path between said first and second optical means and designed to reflect almost the entire laser beam to these second optical means and to transmit an image of said object to said means for observing.

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18. (New) Device according to claim 1, wherein said diaphragm is also usable for delimiting the shape of the impact of the laser beam on an object to be analyzed.

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